

Seat No.	
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ENT-28

Total No. of Pages : 16

M.Sc. Entrance examination May-2026
Biochemistry
Subject: Medical Information Management
Subject Code : 77888

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Day and Date : Tuesday, 12-05-2026
Time : 03.30 p.m. to 05.00 p.m.

Total Marks : 100
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Instructions

- 1) All questions are compulsory
 - 2) Each question carries 1 mark.
 - 3) Answers should be marked in the given OMR answer sheet by darkening the appropriate option.
 - 4) Follow the instructions given on OMR sheet.
 - 5) Rough work shall be done on the sheet provided at the end of question paper.
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1. A document that keeps a patient's illness and treatment history is called:
 - a) Laboratory
 - b) Medical record
 - c) Receipt
 - d) None of the above
2. The structural and functional unit of life is.....
 - a) Tissue
 - b) Cell
 - c) Organ
 - d) Organism
3. had discovered the double helical structure of DNA.
 - a) Messelson & Stahl
 - b) Newton & Stahl
 - c) Fedrich Meischer
 - d) Watson & Crick
4. Green color of plants is due to
 - a) Hemoglobin
 - b) Chlorophyll
 - c) Glucose
 - d) None of the above
5. Bacterial DNA is not cleaved by its own restriction enzymes because they are.....
 - a) methylated
 - b) deleted
 - c) bound by inhibitory protein
 - d) not accessible to restriction enzyme.

27. The basis of the malfunction of the hemoglobin molecule in sickle cell anemia is.....
- a) Substitution of single amino acid
 - b) Incorrect secondary structure.
 - c) Faulty binding of heme group
 - d) reduced affinity of oxygen
28.is secreted by the β -cells of pancreas.
- a) Insulin
 - b) Thyroxin
 - c) Glycogen
 - d) None of above
29. Example of monosaccharide is
- a) starch
 - b) glucose
 - c) maltose
 - d) none of the above
30. reagent is used for the estimation of protein.
- a) Carbohydrate
 - b) Biuret
 - c) PNA
 - d) none of the above
31. The process of monitoring drug safety is called:
- a) Pharmacology
 - b) Pharmacovigilance
 - c) Pharmaceutics
 - d) Microbiology
32. A medicine to lower blood pressure is called.....
- a) Analgesic
 - b) Antacid
 - c) Antihypertensive
 - d) Antipyretic

33. Enzyme increases rate of reaction by
- a) increasing the free energy of activation
 - b) increasing free energy change of the reaction
 - c) changing the equilibrium constant of the reaction
 - d) decreasing the energy of activation
34. The H-O-H bond angle of water is
- a) 109.5°
 - b) 105.4°
 - c) 102.5°
 - d) 104.5°
35. A separate tRNA synthetase exists for
- a) each amino acid
 - b) each anticodon
 - c) each codon
 - d) both a and c correct
36. Function of DNA polymerase is
- a) to unwind the DNA helix during replication
 - b) to degrade damaged DNA
 - c) to add nucleotides to end of a growing DNA strand
 - d) to rejoin two DNA strands
37. Photosynthesis is
- a) anabolic reaction
 - b) catabolic reaction
 - c) energy releasing reaction
 - d) none of the above
38. Two polypeptide chains of insulin are linked by cross-linkage.
- a) sulphide
 - b) disulphide
 - c) both a & b
 - d) none of these
39. Starch is a polymer of
- a) fructose
 - b) glucose
 - c) sucrose
 - d) maltose

40. The K_m of enzyme is
- a) One half of the V_{max}
 - b) a dissociation constant
 - c) the substrate concentration that gives maximal velocity
 - d) the substrate concentration that gives half maximal velocity
41. Proteins are polymers of
- a) sugar
 - b) lipids
 - c) amino acids
 - d) nucleotides
42. Ames test is used for checking
- a) pathogenicity of an organism
 - b) mutagenicity of an organism
 - c) stability of a substance
 - d) none
43. Bacterial mobility is primarily due to.....
- a) peptidoglycan
 - b) flagella
 - c) capsule
 - d) none of the above
44. Restriction enzymes are synthesized by
- a) bacteria only
 - b) yeast and Bacteria
 - c) eukaryotic cell
 - d) all kinds of cell
45. Energy is stored in the liver and muscle in the form of
- a) glycogen
 - b) starch
 - c) fat
 - d) cholesterol

46. GC rich DNA has higher stability than AT rich DNA because
- a) Fewer Na ions bind to AT base pair.
 - b) GC base pair have three hydrogen bonds
 - c) stacking interaction is stronger in GC base pair
 - d) both b & c
47. Human genome project was started in the year
- a) 1990
 - b) 1988
 - c) 1982
 - d) 1996
48. is called as father of medical microbiology.
- a) Louis pastures
 - b) Robert Koch
 - c) Von Behring
 - d) Landsteiner
49. Sewage water can be recycled by using
- a) microbes as purifiers
 - b) aquatic plants
 - c) aquatic animals
 - d) all the above
50. Malaria is caused by
- a) ascaris
 - b) foulair
 - c) leech
 - d) plasmodium
51. Animal virus usually penetrates host cell by
- a) Injection
 - b) Exocytosis
 - c) Endocytosis
 - d) a vector
52. The concept of ionic bond was put forward by
- a) Lewis
 - b) Kossel
 - c) Arrhenius
 - d) Bronsted

69. Which of the following is a high level language?
- a) FORTRAN
 - b) BASIC
 - c) COBAL
 - d) All of the above
70. is an input device.
- a) Printer
 - b) Keyboard
 - c) Monitors
 - d) none of the above
71. digits are used in binary number system.
- a) Two
 - b) One
 - c) Three
 - d) Four
72. Memory of computer is measured in
- a) Kcal
 - b) Kilobytes
 - c) Kilojoules
 - d) Kilogram
73. Following are all software, except
- a) MS-Excel
 - b) Hard Disk
 - c) MS-Powepoint
 - d) MS-Office
74. What kind of data send through E-mail?
- a) Audio
 - b) Pictures
 - c) Video
 - d) All of these
75. A collection of eight bits is called
- a) Word
 - b) Byte
 - c) Record
 - d) File
76. A billionth of a second is defined as a
- a) Milliseconds
 - b) Microseconds
 - c) Nanoseconds
 - d) Picoseconds

77. Low level computer language uses
- a) English words
 - b) Mnemonic codes
 - c) Limited grammar
 - d) Mathematical symbols
78. Ozone layer protects us from.....
- a) Rain
 - b) Sun's harmful rays
 - c) Wind
 - d) Cold
79. RAM means
- a) Random Access Memory
 - b) Random Available Memory
 - c) Readily Available Memory
 - d) None of these
80. bytes correspond to 1 KB.
- a) 1024
 - b) 10
 - c) 10,000
 - d) 1000
81. language is used to write Web pages.
- a) HTML
 - b) C-language
 - c) Perl
 - d) None of the above
82. Sound cannot travel through.
- a) Solid
 - b) Liquid
 - c) Gas
 - d) Vacuum
83.is called a 4 bit data unit.
- a) byte
 - b) nibble
 - c) number
 - d) None of the above
84. One of the following is used as a storage device.
- a) printer
 - b) compact disk
 - c) microphone
 - d) none of the above

85. Computer memory consists of microchips.
- a) RAM
 - b) ROM
 - c) PROM
 - d) all of these
86. language is used to write a source program.
- a) High level
 - b) Symbolic
 - c) English
 - d) Machine
87. Shoot formation is initiated by
- a) Auxin
 - b) Cytokinin
 - c) Ethylene
 - d) Gibberellin
88. The study of formation growth and development of new individual from the egg is known as
- a) Embryology
 - b) Pathology
 - c) Morphogenesis
 - d) Histology
89. The growth involves
- a) Cell division
 - b) Cell enlargement
 - c) Cell maturation
 - d) All of the above
90. The universal donor blood group is....
- a) A
 - b) AB
 - c) 0
 - d) B
91. In annual plant exchange of gases takes place mainly through
- a) Stomata
 - b) Stem
 - c) Leaf scars
 - d) Lenticels
92. The connective tissue is originated from
- a) Ectoderm
 - b) Mesoderm
 - c) Endoderm
 - d) All of these

100. Among following which one is correct about thymidine?

- a) replaced by uracil in RNA
- b) in double stranded DNA concentration of thymidine is equal to adenosine
- c) forms two hydrogen bonds with adenosine.
- d) all of the above



- Rough Work -